Please add the following new claims:

69. (New) The method of any one of claims 1, 2 and 66, wherein said one or more DNA polymerases produce less than about 5% of amplification products containing one or more non-templated nucleotides at their 3' termini.

70. (New) The method of any one of claims 1, 2 and 66, wherein said one or more DNA polymerases produce less than about 1% of amplification products containing one or more non-templated nucleotides at their 3' termini.

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71. (New) The kit of claim 23, wherein said one or more DNA polymerases produce less than about 5% of amplification products containing one or more non-templated nucleotides at their 3' termini.

72. (New) The kit of claim 23, wherein said one or more DNA polymerases produce less than about 1% of amplification products containing one or more non-templated nucleotides at their 3' termini.

Please substitute the following claim 1 for pending claim 1:

B3

1. (Once Amended) A method of identifying, analyzing or typing a polymorphic DNA fragment in a sample of DNA, said method comprising contacting said sample of DNA with one or more DNA polymerases, wherein said DNA polymerases are mutated to be substantially reduced in the ability to add one or more non-templated

nucleotides to the 3' terminus of a DNA molecule; amplifying said polymorphic DNA fragment within said sample; and analyzing said amplified polymorphic DNA fragment.

B3 CONT.

~~Please substitute the following claim 2 for pending claim 2~~:

2. (Once Amended) A method of producing amplified copies of a polymorphic DNA fragment which comprise substantially no non-templated 3' terminal nucleotides, said method comprising contacting a DNA sample with one or more DNA polymerases, wherein said DNA polymerases are mutated to be substantially reduced in the ability to add one or more non-templated nucleotides to the 3' terminus of a DNA molecule; and amplifying said polymorphic DNA fragment within said DNA sample.

Please substitute the following claim 7 for pending claim 7:

B4

7. (Once Amended) The method of claim 6, wherein said thermostable DNA polymerases are *Thermotoga* DNA polymerases or mutants thereof.

Please substitute the following claim 21 for pending claim 21:

B5

21. (Once Amended) A method of determining the relationship between a first individual and a second individual, said method comprising comparing a population of amplified DNA molecules in a sample of DNA from said first individual to that of said second individual, wherein said DNA sample of said first and second individuals are analyzed according to the method of claim 1.

Please substitute the following claim 23 for pending claim 23:

B6

23. (Once Amended) A kit comprising one or more DNA polymerases, wherein said DNA polymerases are mutated to be substantially reduced in the ability to add one or more non-templated nucleotides to the 3' terminus of a DNA molecule.

Please substitute the following claim 66 for pending claim 66:

66. (Once Amended) A method for amplifying a double stranded DNA molecule, comprising:

(a) providing a first and second primer, wherein said first primer is complementary to a sequence at or near the 3'-termini of the first strand of said DNA molecule and said second primer is complementary to a sequence at or near the 3'-termini of the second strand of said DNA molecule;

B7

(b) hybridizing said first primer to said first strand and said second primer to said second strand in the presence of the one or more DNA polymerases which have been mutated to reduce, substantially reduce or eliminate the ability of the polymerases to add non-templated 3' nucleotides to a synthesized nucleic acid molecule under conditions such that a third DNA molecule complementary to said first strand and a fourth DNA molecule complementary to said second strand are synthesized;

(c) denaturing said first and third strand, and said second and fourth strands; and

(d) repeating steps (a) to (c) one or more times.